

Micro Commercial Components 21201 Itasca Street Chatsworth CA 91311

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MR2400 thru MR2410

24 Amp Recovery Rectifier 50 - 1000 Volts

Features

- Low Cost
- Low Forward Voltage Drop
- High Current Capability
- High Surge Current Capability
- Low Leakage

Maximum Ratings

- Operating Temperature: -65°C to +150°C
 Store to Temperature: -65°C to +450°C
- Storage Temperature: -65°C to +150°C
- Maximum Thermal Resistance; 10 °C/W Junction To Ambient

MCC	Device	Maximum	Maximum	Maximum
Catalog	Marking	Recurrent	RMS	DC
Number		Peak	Voltage	Blocking
		Reverse		Voltage
		Voltage		
MR2400		50V	35V	50V
MR2401		100V	70V	100V
MR2402		200V	140V	200V
MR2404		400V	280V	400V
MR2406		600V	420V	600V
MR2408		800V	560V	800V
MR2410		1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

<u>liecti icai characteristics @ 25 c diffess otifiel wise specified</u>						
Average Forward	$I_{F(AV)}$	24 A	T _A = 150°C			
Current						
Peak Forward Surge	I_{FSM}	400A	8.3ms, half sine			
Current						
Maximum						
Instantaneous	V_F	1.18V	$I_{FM} = 24.0A;$			
Forward Voltage			$T_{J} = 25^{\circ}C^{*}$			
Maximum DC						
Reverse Current At	I_R		$T_J = 25^{\circ}C$			
Rated DC Blocking						
Voltage		10ф.А				
Typical Junction	CJ	200pF	Measured at			
Capacitance	9,	. 20001	1.0MHz, V _R =4.0V			

^{*}Pulse test: Pulse width 300 µsec, Duty cycle 1%

DIMENSIONS									
	INCHES		мм						
DIM	MIN	MAX	MIN	MAX	NOTE				
Α	.560	.625	14.22	15.88					
В	.380	.420	9.65	10.67					
С	.284	.310	7.21	7.87					
D	.025	.045	0.64	1.14					
F	.060	.090	1.52	2.29					
G	.170	.210	4.32	5.33					
Η	.080	.110	2.03	2.92					
J	.023	.029	0.58	0.74					
K		.562		14.27					
L		1.187		30.15					
N	.230	.270	5.84	6.86					
Р	.100	.120	2.54	3.05					
Q	.139	.147	3.53	3.73					
R		.200		5.08					
S	.140	.150	3.55	3.80					
T	.670	.690	17.02	17.53					

MR2400 thru MR2410

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Figure 1 Typical Forward Characteristics

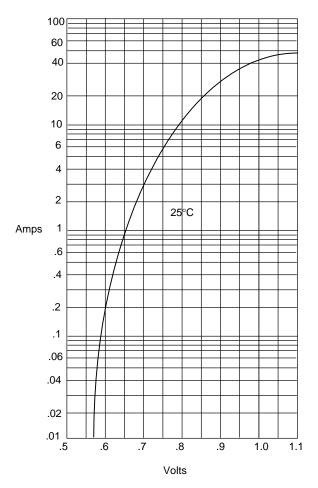


Figure 2 Forward Derating Curve 25 20 Amps 10 Single Phase, Half Wave 60Hz Resistive or Inductive 0 40

> Average Forward Rectified Current - Amperes/ersus Ambient Temperature -°C

100

120

150

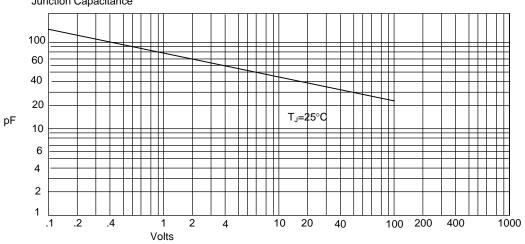
175

60

80

Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts

Figure 3 Junction Capacitance



Junction Capacitance - pFversus Reverse Voltage - Volts

MR2400 thru M2410



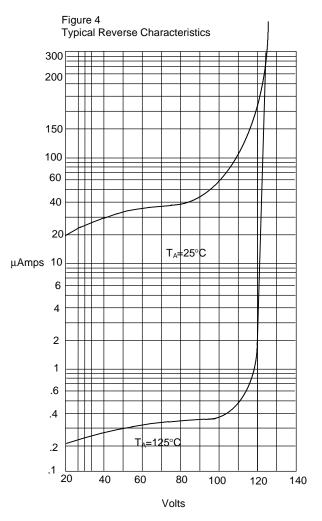


Figure 5
Peak Forward Surge Current

400
250
200
Amps
150
100
0
1 2 4 6 8 10 20 40 60 80 100

Cycles

Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles

Instantaneous Reverse Leakage Current - MicroAmperes*versus* Percent Of Rated Peak Reverse Voltage - Volts